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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/581,500	11/14/2000	Christine Van Broeckhoven	B0192/7019	9967

7590 10/02/2002  
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EXAMINER

JOHANNSEN, DIANA B

ART UNIT PAPER NUMBER

1634

DATE MAILED: 10/02/2002

17

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/581,500

Applicant(s)

VAN BROECKHOVEN ET AL.

Examiner

Diana B. Johannsen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-47 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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***Election/Restriction***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-10, 20, and 25-32, drawn to methods in which nucleic acids are employed in the detection of polymorphisms of human chromosome 18q associated with a mood disorder.

Group II, claim(s) 11-13 and 33-35, drawn to methods in which antibodies are employed in detection of proteins associated with a mood disorder.

Group III, claim(s) 14, drawn to a method of preparing a contig map.

Group IV, claim(s) 15, drawn to methods of detecting gene variants in which mammalian cells are transfected with cloned DNA.

Group V, claim(s) 16, drawn to methods of detecting gene variants comprising a step of subcloning.

Group VI, claim(s) 17, 19, 21-22, 36, and 39-42, drawn to nucleic acids.

Group VII, claim(s) 18, 23-24, and 37, drawn to polypeptides.

Group VIII, claim(s) 43, drawn to a cell line.

Group IX, claim(s) 44, drawn to a method of screening for inhibitors or enhancers of gene expression comprising detection of nucleic acids.

Group X, claim(s) 45, drawn to a method of screening for inhibitors or enhancers of gene expression comprising detection of polypeptides.

Group XI, claim(s) 46, drawn to a method of screening for inhibitors or enhancers of gene expression comprising detecting expression of a reporter molecule.

Group XII, claim(s) 47, drawn to enhancer and inhibitor compounds.

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2. The inventions listed as Groups I-XII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons.

Unity of invention exists only when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding special technical features. The expression "special technical feature" is defined in PCT Rule 13.2 as meaning those technical features that define a contribution that an invention considered as a whole makes over the art. Regarding the relationship of Group I with Groups II-XII, the shared technical feature that is present is a particular region of chromosome 18. However, this region of chromosome 18 was well known in the prior art, as was a relationship between this region of chromosome 18 and mood disorders (see, e.g., WO 97/17445 [10/1997]). Accordingly, this region of chromosome 18 cannot constitute a special technical feature as defined by PCT Rule 13.2, and unity of invention is therefore lacking.

Further, Groups I-XII do not share another technical feature that might constitute a "special technical feature" as defined by PCT Rule 13.2. The proteins of Group VII, which are composed of amino acids and employed in, e.g., methods of making antibodies and/or methods requiring protein/antibody binding, are structurally and functionally distinct from the nucleic acids of Group VI, which are composed of nucleotides and employed in, e.g., methods of hybridization. The cells/organisms of Group VIII comprise both nucleic acids and proteins, but are complex living structures comprising a multitude of additional components. The enhancer/inhibitor compounds of

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Group XII are not disclosed as sharing either structural or functional properties with the products of Groups VI, VII, or VIII. The methods of Groups I-V and IX-XI each have different objectives and/or require the use of different sets of reagents and different steps. The method of Group I requires steps of, e.g., hybridization, to achieve the objective of detecting nucleic acid polymorphisms. The method of Group II requires the use of antibodies in detection of proteins. The method of Group III sets forth a step and objective of constructing a contig map. The method of Group IV requires transfecting and culturing steps, while that of Group V requires a step of subcloning. Groups IX-XI employ nucleic acids, proteins, and reporter plasmids, respectively, to achieve detection of enhancers or inhibitors. Thus, the inventions of Groups I-XII are not so linked by a special technical feature within the meaning of PCT Rule 13.2 so as to form a single general inventive concept.

#### **Election Requirement Applicable to Groups I-II and IV-XII**

3. It is noted that Groups I-II and IV-XII detailed above each read on numerous different molecules and polymorphisms. The numerous molecules and variants encompassed by the claims have different structures and different functional characteristics. A reference against one molecule or polymorphism would not be a reference against another, and the differing molecules/variants do not share a special technical feature within the meaning of PCT Rule 13.2. Accordingly, a further restriction is applied to each of Groups I-II and IV-XII. Depending on the Group elected, Applicant must further elect a single molecule (or combination of molecules) and/or a single polymorphism (or combination of polymorphisms). Applicant should specifically identify

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the molecule(s)/polymorphism(s) elected and the SEQ ID NOS corresponding thereto. For example, if Group I is elected, Applicant must further elect a single gene or variant (e.g., a variant comprising a particular polymorphism or polymorphisms), and further specify the SEQ ID NO or SEQ ID Nos (and YAC clone(s)) that include that gene or variant, as well as those primers that specifically amplify that variant (as set forth in, e.g., claim 28). It is further noted that the claims of the elected Group will be examined to the extent that they are drawn to the elected molecule(s)/polymorphism(s).

**This is not an election of species. Applicant is advised that examination will be restricted to only the elected molecule(s)/variant(s).**

4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diana B. Johannsen whose telephone number is 703/305-0761. The examiner can normally be reached on Monday-Friday, 7:30 am-4:00 pm.

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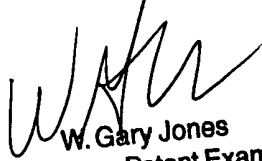
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones can be reached at 703/308-1152. The fax phone numbers for the organization where this application or proceeding is assigned are 703/872-9306 for regular communications and 703/872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703/308-0196.

Diana B. Johannsen  
September 30, 2002

  
W. Gary Jones  
Supervisory Patent Examiner  
Technology Center 1600